

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/26381

A. CLASSIFICATION OF SUBJECT MATTER												
IPC(7) : G06F 15/16; H04M 11/00												
US CL : 709/206, 207, 219, 227, 229, 248; 379/93.01, 93.02, 100.												
According to International Patent Classification (IPC) or to both national classification and IPC												
B. FIELDS SEARCHED												
Minimum documentation searched (classification system followed by classification symbols) U.S. : 709/203, 206, 207, 219, 227, 228, 229, 248; 379/93.01, 93.02, 100.08; 455/411												
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched												
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)												
C. DOCUMENTS CONSIDERED TO BE RELEVANT												
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.										
X	US 6,163,274 A (LINDGREN et al.) 19 December 2000 (19.12.2000); abstract; Fig. 1-3; col. 1, line 5 - col. 2, line 12; col. 2, lines 30-52; col. 3, lines 5-20, 25-50	10, 15-18										

Y		1-9, 11-14										
Y	US 6,526,274 B1 (FICKES et al.) 25 February 2003 (25.02.2003); abstract; Fig. 1-4, 7-9, 14; col. 1, lines 14-65; col. 3, lines 15-50; col. 5, lines 5-26; col. 6, line 29 - col. 7, line 37; col. 9, lines 35-40 and 50-55; col. 10, lines 25-30	1-9, 11-14										
Y	US 6,563,800 B1 (SALO et al.) 13 May 2003 (13.05.2003); abstract, Fig. 1B, 1C, 2, 5B, 7A, 7B; col. 1, line 1 - col. 4, line 35; col. 5, line 30 - col. 8, line 40	2-4, 11-13										
A	US 6,549,939 B1 (FORD et al.) 15 April 2003 (15.04.2003); abstract; Fig. 1-3; col. 1, line 5 - col. 2, line 25	1-18										
X, P	US 6,668,043 B2 (HYZIAK et al.) 23 December 2003 (23.12.2003); abstract; Fig. 1-4; col. 1, lines 10-37; col. 2, line 55 - col. 3, line 65; col. 3, lines 55-62; col. 4, lines 4-50	19-23										
A	US 6,430,407 B1 (TURTIAINEN et al.) 06 August 2002 (06.08.2002); abstract; Fig. 1-6; col. 1, line 10 - col. 5, line 52	2-4, 11-14										
A, P	US 6,668,167 B2 (MCDOWELL et al.) 23 December 2003 (19.12.2003); abstract; Fig. 1-11, 13-16; col. 1, line 15 - col. 3, line 10	19-23										
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.												
* Special categories of cited documents: <table border="0"> <tr> <td>"A" document defining the general state of the art which is not considered to be of particular relevance</td> <td>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</td> </tr> <tr> <td>"E" earlier application or patent published on or after the international filing date</td> <td>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</td> </tr> <tr> <td>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</td> <td>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</td> </tr> <tr> <td>"O" document referring to an oral disclosure, use, exhibition or other means</td> <td>"&" document member of the same patent family</td> </tr> <tr> <td>"P" document published prior to the international filing date but later than the priority date claimed</td> <td></td> </tr> </table>			"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention	"E" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone	"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art	"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family	"P" document published prior to the international filing date but later than the priority date claimed	
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"E" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone											
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"P" document published prior to the international filing date but later than the priority date claimed												
Date of the actual completion of the international search		Date of mailing of the international search report										
03 February 2004 (03.02.2004)		23 FEB 2004										
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C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A, P	US 6,671,757 B1 (MULTER et al.) 30 December 2003 (30.12.2003); abstract; Fig. 7-11, 13-16; col. 1, line 5 - col. 4, line 40	1-18

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